STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION

MUNICIPAL NPDES PERMIT

issued to

Permittee:
City of Norwalk
P.O. Box 5125
125 East Avenue
Norwalk, Connecticut 06856-5125

Location Address:
Norwalk WPCF
60 South Smith Street
East Norwalk, Connecticut 06855

Facility ID: 103-001 **Permit ID:** CT0101249 **Permit Expires:** September 28, 2010

Receiving Stream: Norwalk River **Design Flow Rate:** 18.0 MGD

SECTION 1: GENERAL PROVISIONS

(A) This permit is **reissued** in accordance with Section 22a-430 of Chapter 446k, Connecticut General Statutes ("CGS"), and Regulations of Connecticut State Agencies ("RCSA") adopted thereunder, as amended, and Section 402(b) of the Clean Water Act, as amended, 33 USC 1251, et. seq., and pursuant to an approval dated September 26, 1973, by the Administrator of the United States Environmental Protection Agency for the State of Connecticut to administer a N.P.D.E.S. permit program.

(B) City of Norwalk, ("permittee"), shall comply with all conditions of this permit including the following sections of the RCSA which have been adopted pursuant to Section 22a-430 of the CGS and are hereby incorporated into this permit. **Your attention is especially drawn to the notification requirements of subsection (i)(2), (i)(3), (j)(1), (j)(6), (j)(8), (j)(9)(C), (j)(10)(C), (j)(11)(C), (D), (E), and (F), (k)(3) and (4) and (l)(2) of Section 22a-430-3.** To the extent this permit imposes conditions more stringent than those found in the regulations, this permit shall apply.

Section 22a-430-3 General Conditions

- **(a)** Definitions
- **(b)** General
- **(c)** Inspection and Entry
- **(d)** Effect of a Permit
- **(e)** Duty to comply
- **(f)** Proper Operation and Maintenance
- **(g)** Sludge Disposal
- **(h)** Duty to Mitigate
- **(i)** Facility Modifications; Notification
- **(j)** Monitoring, Records and Reporting Requirements
- **(k)** Bypass
- **(l)** Conditions Applicable to POTWs
- **(m)** Effluent Limitation Violations
- **(n)** Enforcement
- **(o)** Resource Conservation
- **(p)** Spill Prevention and Control
- **(q)** Instrumentation, Alarms, Flow Recorders
- **(r)** Equalization

Section 22a-430-4 Procedures and Criteria

- **(a)** Duty to Apply
- **(b)** Duty to Reapply
- **(c)** Application Requirements
- **(d)** Preliminary Review
- **(e)** Tentative Determination
- **(f)** Draft Permits, Fact Sheets
- **(g)** Public Notice, Notice of Hearing

(h) Public Comments
(i) Final Determination
(j) Public Hearings
(k) Submission of Plans and Specifications. Approval.
(l) Establishing Effluent Limitations and Conditions
(m) Case-by-Case Determinations
(n) Permit Issuance or Renewal
(o) Permit or Application Transfer
(p) Permit Revocation, Denial or Modification
(q) Variances
(r) Secondary Treatment Requirements
(s) Treatment Requirements
(t) Discharges to POTWs - Prohibitions

(C) Violations of any of the terms, conditions, or limitations contained in this permit may subject the permittee to enforcement action including, but not limited to, seeking penalties, injunctions and/or forfeitures pursuant to applicable sections of the CGS and RCSA.

(D) Any false statement in any information submitted pursuant to this Section of the permit may be punishable as a criminal offense under Section 22a-438 or 22a-131a of the CGS or in accordance with Section 22a-6, under Section 53a-157b of the CGS.

(E) The permittee shall comply with Section 22a-416-1 through Section 22a-416-10 of the RCSA concerning operator certification.

(F) No provision of this permit and no action or inaction by the Commissioner shall be construed to constitute an assurance by the Commissioner that the actions taken by the permittee pursuant to this permit will result in compliance or prevent or abate pollution.

(G) Nothing in this permit shall relieve the permittee of other obligations under applicable federal, state and local law.

(H) An annual fee shall be paid for each year this permit is in effect as set forth in Section 22a-430-7 of the RCSA. As of August 20, 2003 the annual fee is $ 2,880.00.

(I) The permittee shall discharge so as not to violate the Interstate Environmental Commission (IEC) Water Quality Regulations promulgated pursuant to the authority conferred upon the IEC by the Tri-State Compact (CGS 22a-294 et seq.) as defined in Attachment 1 Table A.

(J) This permitted discharge is consistent with the applicable goals and policies of the Connecticut Coastal Management Act (Section 22a-92 of the CGS).

SECTION 2: DEFINITIONS

(A) The definitions of the terms used in this permit shall be the same as the definitions contained in Section 22a-423 of the CGS and Section 22a-430-3(a) and 22a-430-6 of the RCSA, except for "Composite", "No Observable Acute Effect Level (NOAEL) " and "Grab Sample Average" which are redefined below.

(B) In addition to the above, the following definitions shall apply to this permit:

"------" in the limits column on the monitoring tables in Attachment 1 means a limit is not specified but a value must be reported on the DMR, MOR, NAR, and/or the ATMR.

"Annual" in the context of any sampling frequency found in Attachment 1, means the sample must be collected in the month of September.

"Average Monthly Limit" means the maximum allowable "Average Monthly Concentration" as defined in Section 22a-430-3(a) of the RCSA when expressed as a concentration (e.g. mg/l); otherwise, it means "Average Monthly Discharge Limitation" as defined in Section 22a-430-3(a) of the RCSA.

"Bi-Monthly" means once every two months including the months of January, March, May, July, September and November.

"Bi-Weekly" means once every two weeks.

"Composite" or **"(C)"** means a sample consisting of a minimum of eight aliquot samples collected at equal intervals of no less than 30 minutes and no more than 60 minutes and combined proportionally to flow over the sampling period provided that during the sampling period the peak hourly flow is experienced.

"Critical Test Concentration" or **"(CTC)"** means the specified effluent dilution at which the permittee is to conduct a single-concentration Aquatic Toxicity Test.

"Daily Composite" or **"(DC)"** means a composite sample taken over a full operating day consisting of grab samples collected at equal intervals of no more than sixty (60) minutes and combined proportionally to flow; or, a composite sample continuously collected over a full operating day proportionally to flow.

"Daily Concentration" means the concentration of a substance as measured in a daily composite sample, or, arithmetic average of all grab sample results defining a grab sample average.

"Daily Quantity" means the quantity of waste discharged during an operating day.

"Geometric Mean" is the "n"th root of the product of "n" observations.

"Grab Sample Average" means the arithmetic average of all grab sample analyses.

"Infiltration" means water other than wastewater that enters a sewer system (including sewer system and foundation drains) from the ground through such means as defective pipes, pipe joints, connections, or manholes. Infiltration does not include, and is distinguished from, inflow.

"Inflow" means water other than wastewater that enters a sewer system (including sewer service connections) from sources such as, but not limited to, roof leaders, cellar drains, yard drains, area drains, drains from springs and swampy areas, cross connections between storm sewers and sanitary sewers, catch basins, cooling towers, storm waters, surface runoff, street wash waters, or drainage. Inflow does not include, and is distinguished from, infiltration.

"Instantaneous Limit" means the highest allowable concentration of a substance as measured by a grab sample, or the highest allowable measurement of a parameter as obtained through instantaneous monitoring.

"In-stream Waste Concentration" or **"(IWC)"** means the concentration of a discharge in the receiving water after mixing has occurred in the allocated zone of influence.

"Maximum Daily Limit" means the maximum allowable "Daily Concentration" (defined above) when expressed as a concentration (e.g. mg/l), otherwise, it means the maximum allowable "Daily Quantity" as defined above, unless it is expressed as a flow quantity. If expressed as a flow quantity it means "Maximum Daily Flow" as defined in Section 22a-430-3(a) of the RCSA.

"Monthly Minimum Removal Efficiency" means the minimum reduction in the pollutant parameter specified when the effluent average monthly concentration for that parameter is compared to the influent average monthly concentration.

"NA" as a Monitoring Table abbreviation means "not applicable".

"NR" as a Monitoring Table abbreviation means "not required".

"No Observable Acute Effect Level" or **"(NOAEL)"** means any concentration equal to or less than the critical test concentration in a single concentration (pass/fail) toxicity test, conducted pursuant to Section 22a-430-3(j)(7)(A)(i) of the RCSA, demonstrating greater than 90% or greater survival of test organisms at the CTC.

"Quarterly" in the context of a sampling frequency, means sampling is required in the months of March, June, September and December.

"Range During Sampling" or **"(RDS)"** as a sample type means the maximum and minimum of all values recorded as a result of analyzing each grab sample of; 1) a Composite Sample, or, 2) a Grab Sample Average. For those permittees with pH meters that provide continuous monitoring and recording, Range During Sampling means the maximum and minimum readings recorded with the continuous monitoring device during the Composite or Grab Sample Average sample collection.

"Range During Month" or **"(RDM)"** as a sample type means the lowest and the highest values of all of the monitoring data for the reporting month.

"MGD" means million gallons per day.

"Sanitary Sewage" means wastewaters from residential, commercial and industrial sources introduced by direct connection to the sewage collection system tributary to the treatment works including non-excessive inflow/infiltration sources.

"Twice per Month" when used as a sample frequency shall mean two samples per calendar month collected no less than 12 days apart.

"ug/l" means micrograms per liter

"Workday" in the context of a sampling frequency means, Monday through Friday excluding holidays.

SECTION 3: COMMISSIONER'S DECISION

(A) The Commissioner of Environmental Protection ("Commissioner") has issued a final decision and found that continuance of the existing system to treat the discharge will protect the waters of the state from pollution. The Commissioner's decision is based on application #200101436 for permit **reissuance** received on April 25, 2001 and the administrative record established in the processing of that application.

(B) The Commissioner hereby authorizes the Permittee to discharge in accordance with the provisions of this permit, the above referenced application, and all approvals issued by the Commissioner or his authorized agent for the discharges and/or activities authorized by, or associated with, this permit.

(C) The Commissioner reserves the right to make appropriate revisions to the permit, if required after Public Notice, in order to establish any appropriate effluent limitations, schedules of compliance, or other provisions which may be authorized under the Federal Clean Water Act or the CGS or regulations adopted thereunder, as amended. The permit as modified or renewed under this paragraph may also contain any other requirements of the Federal Clean Water Act or CGS or regulations adopted thereunder which are then applicable.

SECTION 4: GENERAL LIMITATIONS AND OTHER CONDITIONS

(A) Flows up to 30 million gallons per day must receive advanced treatment with denitrification followed by hypochlorite disinfection and bisulfite dechlorination prior to discharge to the Norwalk River through outfall number 001-1.

(B) Wet weather combined municipal and storm wastewater flows, above the 30 million gallons per day being treated through advanced treatment, may receive either advanced treatment with denitrification followed by hypochlorite disinfection and bisulfite dechlorination prior to discharge to the Norwalk River through outfall number 001-1 or microstrainer treatment and hypochlorite disinfection prior to discharge to the Norwalk River through outfall number 002-1.

(C) The Permittee shall not accept any new sources of non-domestic wastewater conveyed to its POTW through its sanitary sewage system or by any means other than its sanitary sewage system unless the generator of such wastewater; (a) is authorized by a permit issued by the Commissioner under Section 22a-430 CGS (individual permit), or, (b) is authorized under Section 22a-430b (general permit), or, (c) has been issued an emergency or temporary authorization by the Commissioner under Section 22a-6k. All such non-domestic wastewaters shall be processed by the POTW via receiving facilities at a location and in a manner prescribed by the permittee which are designed to contain and control any unplanned releases.

(D) No new discharge of domestic sewage from a single source to the POTW in excess of 50,000 gallons per day may be authorized by the permittee until the discharger has registered the discharge under the general permit for domestic sewage reissued by the Commissioner on June 12, 2002 pursuant to Section 22a-430b of the CGS.

(E) The permittee shall maintain a system of user charges sufficient to operate and maintain the POTW (including the collection system) and replace critical components.

(F) The permittee shall maintain a sewer use ordinance that is consistent with the Model Sewer Ordinance for Connecticut Municipalities prepared by the Department of Environmental Protection. The Commissioner of Environmental Protection alone may authorize certain discharges which may not conform to the Model Sewer Ordinance.

(G) No discharge shall contain, or cause in the receiving stream, a visible oil sheen or floating solids; or cause visible discoloration or foaming in the receiving stream.

(H) No discharge shall cause acute or chronic toxicity in the receiving water body beyond any Zone Of Influence (ZOI) specifically allocated to that discharge in this permit.

(I) The permittee shall maintain an alternate power source adequate to provide full operation of all pump stations in the sewage collection system and to provide a minimum of primary treatment and disinfection at the water pollution control facility to insure that no discharge of untreated wastewater will occur during a failure of a primary power source.

(J) The average monthly effluent concentration shall not exceed 15% of the average monthly influent concentration for BOD_5 and Total Suspended Solids for all daily composite samples taken in any thirty calendar day period.

(K) Any new or increased amount of domestic sewage discharge to the sewer system is prohibited where it will cause a dry weather overflow or exacerbate an existing dry weather overflow.

(L) Sludge Conditions

(1) The permittee shall comply with all existing federal and state laws and regulations that apply to sewage sludge use and disposal practices, including but not limited to 40 CFR Part 503.

(2) If an applicable management practice or numerical limitation for pollutants in domestic sewage sludge more stringent than existing federal and state regulations is promulgated under Section 405(d) of the Clean Water Act (CWA), this permit shall be modified or revoked and reissued to conform to the promulgated regulations.

(3) The permittee shall give prior notice to the Commissioner of any change(s) planned in the permittees' sludge use or disposal practice. A change in the permittees' sludge use or disposal practice may be a cause for modification of the permit.

(M) The limits imposed on the discharges listed in this permit take effect on the issuance date of this permit, hence any sample taken after this date which, upon analysis, shows an exceedence of permit limits will be considered non-compliance.

(N) When the arithmetic mean of the average daily flow from the POTW for the previous 180 days exceeds 90% of the design flow rate, the permittee shall develop and submit for the review of the Commissioner within one year, a plan to accommodate future increases in flow to the plant. This plan shall include a schedule for completing any recommended improvements and a plan for financing the improvements.

(O) When the arithmetic mean of the average daily BOD_5 or TSS loading into the POTW for the previous 180 days exceeds 90% of the design load rate, the permittee shall develop and submit for the review of the Commissioner within one year, a plan to accommodate future increases in load to the plant. This plan shall include a schedule for completing any recommended improvements and a plan for financing the improvements.

(P) On or before July 31st of each calendar year the main flow meter shall be calibrated in accordance with the manufacturer's specifications. The actual record of the calibration shall be retained onsite and, upon request, the permittee shall submit to the Commissioner a copy of that record.

(Q) The permittee shall operate and maintain all processes as installed in accordance with the approved plans and

specifications and as outlined in the associated operation and maintenance manual. This includes but is not limited to all recycle pumping systems, aeration equipment, aeration tank cycling, mixing equipment, anoxic basin, chemical feed systems, effluent filters or any other process equipment necessary for the optimal removal of pollutants. The permittee shall not bypass or fail to operate any of the approved equipment or processes without the written approval of the Commissioner.

(R) The permittee is hereby authorized to accept septage at the treatment facility; or other locations as approved by the Commissioner.

(S) The temperature of any discharge shall not increase the temperature of the receiving stream above 85°F, or, in any case, raise the normal temperature of the receiving stream more than 4°F.

SECTION 5: SPECIFIC EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

(A) The discharges shall not exceed and shall otherwise conform to the specific terms and conditions listed in this permit. The discharge is restricted by, and shall be monitored in accordance with Tables A through F which are incorporated in this permit as Attachment 1.

(B) The Permittee shall monitor the performance of the treatment process in accordance with the Monthly Operating Report (MOR) and the Nutrient Analysis Report (NAR) incorporated in this permit as Attachment 2, Tables A and B, respectively.

SECTION 6: SAMPLE COLLECTION, HANDLING and ANALYTICAL TECHNIQUES

(A) Chemical Analysis

(1) Chemical analyses to determine compliance with effluent limits and conditions established in this permit, shall be performed using the methods approved pursuant to the Code of Federal Regulations, Part 136 of title 40 (40 CFR 136) unless an alternative method has been approved in writing pursuant to 40 CFR 136.4 or as provided in Section 22a-430-3-(j)(7) of the RCSA. Chemicals which do not have methods of analysis defined in 40 CFR 136 or the RCSA shall be analyzed in accordance with methods specified in this permit.

(2) All metals analyses identified in this permit shall refer to analyses for Total Recoverable Metal, as defined in 40 CFR 136 unless otherwise specified.

(3) Grab samples shall be taken during the period of the day when the peak hourly flow is normally experienced.

(4) Samples collected for bacteriological examination shall be collected between the hours of 11 a.m. and 3 p.m. or at that time of day when the peak hourly flow is normally experienced.

(5) The Minimum Levels specified below represent the concentrations at which quantification must be achieved and verified during the chemical analyses for the parameters identified in Attachment 1, Tables A, A-1, B and B-1. Analyses for these parameters must include check standards within ten percent of the specified Minimum Level or calibration points equal to or less than the specified Minimum Level.

Parameter	Minimum Level (in ppb)
Arsenic, Total	5 µg/l
Chlorine, Total Residual	50 µg/l
Cyanide (Amenable)	10 µg/l
Mercury, Total	0.2 µg/l
Silver, Total	2 µg/l

(6) The value of each parameter for which monitoring is required under this permit shall be reported to the maximum level of accuracy and precision possible consistent with the requirements of this Section of the permit.

(7) Effluent analyses for which quantification was verified during the analysis at or below the minimum levels specified in this Section and which indicate that a parameter was not detected shall be reported as "less than x" where 'x' is the numerical value equivalent to the analytical method detection limit for that analysis.

(8) Results of effluent analyses which indicate that a parameter was not present at a concentration greater than or equal to the Minimum Level specified for that analysis shall be considered equivalent to zero (0.0) for purposes of determining compliance with effluent limitations or conditions specified in this permit.

(B) Acute Aquatic Toxicity Test

(1) Samples for monitoring of Aquatic Toxicity shall be collected and handled as prescribed in "Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms" (EPA/821-R-02-012).

(a) Composite samples shall be chilled as they are collected. Grab samples shall be chilled immediately following collection. Samples shall be held at 0 - 6°C until Aquatic Toxicity testing is initiated.

(b) Samples shall be taken **after dechlorination for 001-1 and before chlorination for 002-1** for Aquatic Toxicity unless otherwise approved in writing by the Commissioner for monitoring at this facility.

(c) Chemical analyses of the parameters identified in Attachment 1, Table B shall be conducted on an aliquot of the same sample tested for Aquatic Toxicity.

(i) At a minimum, specific conductance, pH, total alkalinity, total hardness, and total residual chlorine shall be measured in the effluent sample and, during Aquatic Toxicity tests, in the highest concentration of the test and in the dilution (control) water at the beginning of the test and at test termination. If total residual chlorine is not detected at test initiation, it does not need to be measured at test termination. Dissolved oxygen, pH, and temperature shall be measured in the control and all test concentrations at the beginning of the test, daily thereafter, and at test termination.

(d) Tests for Aquatic Toxicity shall be initiated within 36 hours of sample collection.

(2) Monitoring for Aquatic Toxicity to determine compliance with the permit condition on Aquatic Toxicity (invertebrate) shall be conducted for 48 hours utilizing neonatal (less than 24 hours old) *Daphnia pulex.*

(3) Monitoring for Aquatic Toxicity to determine compliance with the permit condition on Aquatic Toxicity (vertebrate) shall be conducted for 48 hours utilizing larval (1 to 14-days old with no more than 24 hours range in age) *Pimephales promelas.*

(4) Tests for Aquatic Toxicity shall be conducted as prescribed for static non-renewal acute tests in "Methods for measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms" (EPA/821-R-02-012), except as specified below.

(a) For Aquatic Toxicity limits, and for monitoring only conditions, expressed as a NOAEL value, Pass/Fail (single concentration) tests shall be conducted at a specified Critical Test Concentration (CTC) equal to the Aquatic Toxicity limit, (100% in the case of monitoring only conditions), as prescribed in Section 22a-430-3(j)(7)(A)(i) of the RCSA.

(b) Organisms shall not be fed during the tests.

(c) Synthetic freshwater prepared with deionized water adjusted to a hardness of 50±5 mg/l as $CaCO_3$ shall be used as dilution water in the tests.

(d) Copper nitrate shall be used as the reference toxicant.

(5) For monitoring only conditions compliance shall be demonstrated when the results of a valid pass/fail Aquatic Toxicity Test indicates 90% or greater survival in the effluent at the CTC (100%).

SECTION 7: RECORDING AND REPORTING REQUIREMENTS

(A) The results of chemical analyses and any aquatic toxicity test required above in Section 5 and the referenced

Attachment 1 shall be entered on the Discharge Monitoring Report (DMR) and reported to the Bureau of Water Management. The report shall also include a detailed explanation of any violations of the limitations specified. The DMR must be received at the following address by the 15th day of the month following the month in which samples are collected:

ATTN: Municipal Wastewater Monitoring Coordinator
Connecticut Department of Environmental Protection
Bureau of Water Management, Planning and Standards Division
79 Elm Street
Hartford, Connecticut 06106-5127

(1) For composite samples, from other than automatic samplers, the instantaneous flow and the time of each aliquot sample collection shall be recorded and maintained at the POTW.

(B) Complete and accurate test data, including percent survival of test organisms in each replicate test chamber, LC_{50} values and 95% confidence intervals for definitive test protocols, and all supporting chemical/physical measurements performed in association with any aquatic toxicity test, shall be entered on the Aquatic Toxicity Monitoring Report form (ATMR) and sent to the Bureau of Water Management at the address specified above in Section 7 (A) of this permit by the 15th day of the month following the month in which samples are collected.

(C) The results of the process monitoring required above in Section 5 shall be entered on the Monthly Operating Report (MOR) and Nutrient Analysis Report (NAR) forms, included herein as Attachment 2, Tables A and B, respectively, and reported to the Bureau of Water Management. The MOR report shall also be accompanied by a detailed explanation of any violations of the limitations specified. The MOR and NAR must be received at the address specified above in Section 7 (A) of this permit by the 15th day of the month following the month in which the data and samples are collected.

SECTION 8: RECORDING AND REPORTING OF VIOLATIONS, ADDITIONAL TESTING REQUIREMENTS

(A) If any sample analysis indicates toxicity, or that the test was invalid, a second sample of the effluent shall be collected and tested for Aquatic Toxicity and associated chemical parameters, as described above in Section 5 and Section 6, and the results reported to the Bureau of Water Management (Attn: Aquatic Toxicity) via the ATMR form (see Section 7 (B)) within 30 days of the previous test. These test results shall also be reported on the next months DMR report pursuant to Section 7 (A). The results of all toxicity tests and associated chemical parameters, valid and invalid shall be reported.

(B) If any two consecutive test results or any three test results in a twelve month period indicates toxicity, the permittee shall immediately take all reasonable steps to eliminate toxicity wherever possible and shall submit a report, to the Bureau of Water Management (Attn: Aquatic Toxicity), for the review and written approval of the Commissioner in accordance with Section 22a-430-3(j)(10)(c) of the RCSA describing proposed steps to eliminate the toxic impact of the discharge on the receiving water body. Such a report shall include a proposed time schedule to accomplish toxicity reduction and the permittee shall comply with any schedule approved by the Commissioner.

(C) Section 22a-430-3(k) of the RCSA shall apply in all instances of bypass including a bypass of the treatment plant or a component of the sewage collection system planned during required maintenance. The Department of Environmental Protection, Bureau of Water Management, Planning and Standards Division (860) 424-3704, the Department of Public Health, Water Supply Section (860) 509-7333 and Recreation Section (860) 509-7297, and the local Director of Health shall be notified within 2 hours of learning of the event by telephone during normal business hours. If the discharge or bypass occurs outside normal working hours (8:30 a.m. to 4:30 p.m. Monday through Friday), notification shall be made within 2 hours of learning of the event to the Emergency Response Unit at (860) 424-3338 and the Department of Public Health at (860) 509-8000. A written report shall be submitted to the Department of Environmental Protection, Bureau of Water Management, Planning and Standards Division, Municipal Facilities Section within five days of each occurrence, or potential occurrence, of a discharge or bypass of untreated or partially treated sewage.

The written report shall contain:

(a) The nature and cause of the bypass, permit violation, treatment component failure, and/or equipment failure,

(b) the time the incident occurred and the anticipated time which it is expected to continue or, if the condition has been corrected, the duration,

(c) the estimated volume of the bypass or discharge of partially treated or raw sewage,

(d) the steps being taken to reduce or minimize the effect on the receiving waters, and

(e) the steps that will be taken to prevent reoccurrence of the condition in the future.

For treatment plants south of Interstate 95 and any other plants which may impact shellfishing areas the Department of Agriculture/Aquaculture Division must also be notified within 2 hours by telephone at (203) 874-0696 and in writing within 72 hours of each occurrence of an emergency diversion or by-pass of untreated or partially treated sewage and a copy of the written report should be sent to:

State of Connecticut
Department of Agriculture/Aquaculture Division
P.O. Box 97
Milford, Connecticut 06460

(D) Section 22a-430-3(j) of the RCSA shall apply in the event of any noncompliance with a maximum daily limit and/or any noncompliance that is greater than two times any permit limit. The permittee shall notify in the same manner as in paragraph C of this Section, the Department of Environmental Protection, Bureau of Water Management, Planning and Standards Division except, if the failure occurs outside normal working hours (8:30 a.m. to 4:30 p.m. Monday through Friday) the permittee may wait to make the verbal report until 10:30 am of the next business day.

(E) Section 22a-430-3(j) of the RCSA shall apply in all instances of monitoring equipment failures. In the event of any failure of the monitoring equipment including, but not limited to, loss of refrigeration or loss of flow proportion sampling ability, the permittee shall notify in the same manner as in paragraph C of this Section, the Department of Environmental Protection, Bureau of Water Management, Planning and Standards Division except, if the failure occurs outside normal working hours (8:30 a.m. to 4:30 p.m. Monday through Friday) the permittee may wait to make the verbal report until 10:30 am of the next business day.

(F) In addition to the reporting requirements contained in Section 22a-430-3(i), (j), and (k) of the Regulations of Connecticut State Agencies, the permittee shall notify in the same manner as in paragraph C of this Section, the Department of Environmental Protection, Bureau of Water Management, Planning and Standards Division, Municipal Facilities Section (860) 424-3704 concerning the failure of any major component of the treatment facilities which the permittee may have reason to believe would result in an effluent violation. If the failure occurs outside normal working hours (8:30 a.m. to 4:30 p.m. Monday through Friday), notification shall be made within 2 hours of learning of the event to the Emergency Response Unit at (860) 424-3338 and the Department of Public Health at (860) 509-8000.

SECTION 9: COMPLIANCE SCHEDULES

(A) The permittee, upon issuance of this permit, shall implement the following Best Management Practices (BMPs) to reduce the impact of existing CSO's on the receiving waters. Detailed records of BMP implementation activities shall be kept.

(1) On or before 120 days after the issuance of this permit, the permittee shall identify an operations and maintenance manager to be in responsible charge of the wastewater collection system and serve as the contact person for department personnel regarding combined sewer discharges and within ten days after retaining anyone other than the one originally identified under this paragraph, the permittee shall notify the Commissioner in writing of the identity of such other operations and maintenance manager.

(2) The sewage system shall be inspected and maintained such that deposition of solids and/or other obstructions does not cause restrictions in flow resulting in unnecessary wet weather overflows and to ensure that dry weather discharges are not occurring.

(3) All CSO structures/regulators, pumping stations and tidegates shall be inspected monthly and maintained to ensure that they are in good working condition and adjusted to minimize combined sewer discharges and/or tidal surcharging.

(4) A high flow management plan to maximize use of the collection system for wastewater storage without endangering public health or property, or causing solids deposition problems, and to enable a maximum amount of flow to be handled at the treatment plant without upsetting normal operations shall be developed and implemented

within 90 days of the effective date of the permit and maintained in full effect at all times thereafter.

(5) The permittee shall reduce excessive infiltration/inflow to the sewer system.

(6) On or before February 15th, annually, the permittee shall submit a written report to the Commissioner including the results of all monitoring conducted in accordance with Section 5, Table A, Footnote 3 and Table A-1, of this permit, and for each combined sewer outfall the following information:

(a) the frequency and duration of each precipitation event and each discharge event;

(b) the volume and quality of the discharges; and

(c) determine the impact of the discharges on the receiving waters.

(7) Within 180 days of the effective date of this permit, the permittee shall install and at all times thereafter maintain an identification sign for the siphon emergency bypass outfall structure as required by the Commissioner. The sign shall be located at or near the siphon emergency bypass outfall structure so that it is easily readable by the public. This sign shall be a minimum of 12 x 18 inches in size, with white lettering against a green background, and shall contain the following information:

CITY OF NORWALK
SIPHON EMERGENCY
BYPASS OUTFALL

Anyone observing a discharge from this outfall at any time should call and report it to the Permittee at (203) 854-3212, and to the Department of Environmental Protection at (860) 424-3704 or 424-3338.

(B) The permittee shall use best efforts to submit to the Commissioner all documents required by this Section of the permit in a complete and approvable form. If the Commissioner notified the permittee that any document or other action is deficient, and does not approve it with conditions or modifications, it is deemed disapproved, and the permittee shall correct the deficiencies and resubmit it within the time specified by the Commissioner or, if no time is specified by the Commissioner, within thirty days of the Commissioner's notice of deficiencies. In approving any document or other action under this Compliance Schedule, the Commissioner may approve the document or other action as submitted or performed or with such conditions or modifications as the Commissioner deems necessary to carry out the purposes of this Section of the permit. Nothing in this paragraph shall excuse noncompliance or delay.

(C) Dates. The date of submission to the Commissioner of any document required by this section of the permit shall be the date such document is received by the Commissioner. The date of any notice by the Commissioner under this section of the permit, including but not limited to notice of approval or disapproval of any document or other action, shall be the date such notice is personally delivered or the date three days after it is mailed by the Commissioner, whichever is earlier. Except as otherwise specified in this permit, the word "day" as used in this Section of the permit means calendar day. Any document or action which is required by this Section only of the permit, to be submitted, or performed, by a date which falls on, Saturday, Sunday, or, a Connecticut or federal holiday, shall be submitted or performed on or before the next day which is not a Saturday, Sunday, or Connecticut or federal holiday.

(D) Notification of noncompliance. In the event that the permittee becomes aware that it did not or may not comply, or did not or may not comply on time, with any requirement of this Section of the permit or of any document required hereunder, the permittee shall immediately notify the Commissioner and shall take all reasonable steps to ensure that any noncompliance or delay is avoided or, if unavoidable, is minimized to the greatest extent possible. In so notifying the Commissioner, the permittee shall state in writing the reasons for the noncompliance or delay and propose, for the review and written approval of the Commissioner, dates by which compliance will be achieved, and the permittee shall comply with any dates which may be approved in writing by the Commissioner. Notification by the permittee shall not excuse noncompliance or delay, and the Commissioner's approval of any compliance dates proposed shall not excuse noncompliance or delay unless specifically so stated by the Commissioner in writing.

(E) Notice to Commissioner of changes. Within fifteen days of the date the permittee becomes aware of a change in any information submitted to the Commissioner under this Section of the permit, or that any such information was inaccurate or misleading or that any relevant information was omitted, the permittee shall submit the correct or omitted information to the Commissioner.

(F) Submission of documents. Any document, other than a DMR, ATMR, MOR, or NAR required to be submitted to the Commissioner under this Section of the permit shall, unless otherwise specified in writing by the Commissioner, be directed to:

Rowland Denny, Senior Sanitary Engineer
Department of Environmental Protection
Bureau of Water Management
79 Elm Street
Hartford, Connecticut 06106-5127

This permit is hereby issued on September 29, 2005

Gina McCarthy
Commissioner

ATTACHMENT 1

Tables A through F

TABLE A

Discharge Serial Number (DSN): **001-1**	Monitoring Location: **1**
Wastewater Description: **Sanitary Sewage**	
Monitoring Location Description: **Final Effluent**	

PARAMETER	Units	FLOW/TIME BASED MONITORING				INSTANTANEOUS MONITORING			REPORT FORM	Minimum Level Analysis See Section 6
		Average Monthly Limit	Maximum Daily Limit	Sample Freq.	Sample type	Instantaneous Limit or Required Range	Sample Freq.	Sample Type		
Alkalinity	mg/l	NA	NA	NR	NA	------	Monthly	Grab	MOR	
Biochemical Oxygen Demand (5 day), See remarks C and D	mg/l	20mg/l and 15% of Influent [1, 3]	40	3/week	Daily Composite	NA	NR	NA	DMR/MOR	
Chlorine, Total Residual	mg/l	NA	0.07	8/Workday	Grab Sample Average[4]	0.5	8/Workday	Grab	DMR/MOR	*
Fecal Coliform	colonies per100 ml	NA	NA	NR	NA	see remarks A, B and D below	3/week	Grab	DMR/MOR	
Flow, Average Daily	MGD	18.0	------	Continuous[2]	Daily flow	NA	NR	NA	DMR/MOR	
Nitrogen, Ammonia (total as N)	mg/l	------	------	Weekly	Daily Composite	NA	NR	NA	NAR	
Nitrogen, Nitrate (total as N)	mg/l	------	------	Weekly	Daily Composite	NA	NR	NA	NAR	
Nitrogen, Nitrite (total as N)	mg/l	------	------	Weekly	Daily Composite	NA	NR	NA	NAR	
Nitrogen, Total Kjeldahl	mg/l	------	------	Weekly	Daily Composite	NA	NR	NA	NAR	
Nitrogen, Total	mg/l	------	------	Weekly	Daily Composite	NA	NR	NA	NAR	
Nitrogen, Total (12 month rolling average)[5]	lbs/day	1105	------	Weekly	Daily Composite	NA	NR	NA	DMR/MOR	
Oxygen, Dissolved	mg/l	NA	NA	NR	NA	------	Workday	Grab	MOR	
pH	S.U.	NA	NA	NR	NA	6 - 9	Workday	Grab	DMR/MOR	
Phosphate, Ortho	mg/l	------	------	Weekly	Daily Composite	NA	NR	NA	NAR	
Phosphorus, Total	mg/l	------	------	Weekly	Daily Composite	NA	NR	NA	NAR	
Solids, Settleable	ml/l	NA	NA	NA	NA	------	Workday	Grab	MOR	
Solids, Total Suspended, See remarks C and D	mg/l	20mg/l and 15% of Influent [1, 3]	40	3/week	Daily Composite	NA	NA	NA	DMR/MOR	
Temperature	°F	NA	NA	NR	NA	------	Workday	Grab	MOR	

Turbidity	NTU	NA	NA	NA	NA	------	Workday	Grab	MOR	

TABLE A - CONDITIONS

Footnotes:

[1] The discharge shall meet 20 mg/l and 15% of the average monthly influent BOD_5 and suspended solids (Table D, Monitoring Location (G). The 15% provision only is waived during periods when the facility is treating dilute influent due to storm runoff collected by the Combined Sewer System. The permittee shall state on the monthly Discharge Monitoring Reports and MOR's when exceedance of the 15% provision is due to storm-induced flows.

[2] The permittee shall record and report on the monthly operating report the minimum, maximum and total flow for each day of discharge and the average daily flow for each sampling month. The permittee shall report, on the discharge monitoring report, the average daily flow for each sampling month.

[3] During events when influent flows exceed 30 MGD, the Supplemental Treatment Facility is used and regularly scheduled daily composite sampling is not being performed, these parameters shall be sampled each calendar day of the event according to the measurement frequency specified. For daily composite samples, sampling shall be initiated as soon as effluent discharges from the Supplemental Treatment Facility chlorine contact chamber and end at the completion of the event or until midnight of that calendar day. For events that last into the next calendar day(s), sampling shall be terminated at midnight of the first day (labeled as Day 1), re-initiated and continued until the end of the event or midnight of the next calendar day (labeled as Day 2) and so on until the end of the event. Composite samples shall be flow-proportional. For grab samples, sampling shall occur once per calendar day during the event. During short duration events (less than one hour in duration) or during intermittent events (with no one event exceeding sixty minutes) when the Supplemental Treatment Facility is used this sampling requirement is waived and the samples may be discarded.

[4] The Maximum Daily Concentration to be reported shall be determined by mathematically averaging the results of the eight grab samples required above.

[5] The twelve month rolling average limit is defined as the average of the current months' weekly samples in pounds per day (the current monthly average) averaged with the averages from the previous eleven months.

Remarks:

(A) The geometric mean of the fecal coliform bacteria values for the effluent samples collected in a period of thirty (30) consecutive days shall not exceed 200 per 100 milliliters.

(B) The geometric mean of the fecal coliform bacteria values for the effluent samples collected in a period of seven (7) consecutive days shall not exceed 400 per 100 milliliters.

(C) The Average Weekly discharge Limitation for BOD_5 and Total Suspended Solids shall be 1.5 times the Average Monthly Limit listed above.

(D) In addition to the discharge limits included herein, the following conditions shall apply with the exception of during bypass events:

(i) Biochemical Oxygen Demand shall not exceed 50 mg/l on a 6 consecutive hour average.

(ii) Total Suspended Solids content shall not exceed 50 mg/l on a 6 consecutive hour average.

(iii) Fecal Coliform Content shall not exceed:

(a) 800 per 100 ml on a 6 consecutive hour geometric mean.

(b) No sample may contain more than 2,400 per 100 ml.

TABLE A-1

Discharge Serial Number: **002-1**	Monitoring Location: 1
Wastewater Description: Microscreen treated and chlorinated excess combined sewer wastewater	
Monitoring Location Description: Supplemental Treatment Facility Effluent	

PARAMETER	Units	FLOW/TIME BASED MONITORING		INSTANTANEOUS MONITORING		
		Sample Frequency	Sample Type	Sample Frequency	Sample Type	Reporting Form
Biochemical Oxygen Demand (5 day)	mg/l	Daily/event[1, 3]	Daily Composite	NA	NA	MOR
Chlorine Residual (TRC)	mg/l	NA	NA	Daily/event[1, 3]	Grab	MOR
Event Duration	Days, hours, minutes	Continuous[2]	Time	NA	NA	MOR
Fecal Coliform	per 100 ml	NA	NA	Daily/event[1, 3]	Grab	MOR
Flow[2]	MGD	Continuous	Daily Flow	NA	NA	MOR
Solids, Total Suspended	mg/l	Daily/event[1, 3]	Daily Composite	NA	NA	MOR

TABLE A-1 - CONDITIONS

Footnotes:

[1] During events when influent flows exceed 30 MGD and the Supplemental Treatment Facility is used, these parameters shall be sampled each calendar day of the event according to the measurement frequency specified. For daily composite samples, sampling shall be initiated as soon as effluent discharges from the Supplemental Treatment Facility chlorine contact chamber and end at the completion of the event or until midnight of that calendar day. For events that last into the next calendar day(s), sampling shall be terminated at midnight of the first day (labeled as Day 1), re-initiated and continued until the end of the event or midnight of the next calendar day (labeled as Day 2) and so on until the end of the event. Composite samples shall be flow-proportional. For grab samples, sampling shall occur once per calendar day during the event.

[2] When the influent flow to the wastewater treatment plant exceeds 30 MGD the permittee is authorized to discharge chlorine disinfected microscreen treated combined sewer wastewater from outfall serial number 002-1.

[3] During short duration events (less than one hour in duration) or during intermittent events (with no one event exceeding sixty minutes) when the Supplemental Treatment Facility is used this sampling requirement is waived and the samples may be discarded.

Remarks:

(A) The Permittee is required to calculate combined effluent characteristics for BOD_5, TSS, TRC and fecal coliform using the Supplemental Treatment Facility effluent sampling data, and the secondary effluent sampling data collected during the day of the event. These calculations and the resulting data shall be submitted as an addendum to the DMR and MOR.

TABLE B

Discharge Serial Number (DSN): **001-1**				Monitoring Location: **T**		
Wastewater Description: **Sanitary Sewage**						
Monitoring Location Description: **Final Effluent**						
Allocated Zone of Influence (ZOI): **250cfs**			In stream Waste Concentration (IWC): **10%**			
PARAMETER	**Units**	**Maximum Daily Limit**	**Sampling Frequency**	**Sample Type**	**Reporting Form**	**Minimum Level Analysis See Section 6**
Antimony, Total	mg/l	------	Quarterly	Daily Composite	ATMR	
Aquatic Toxicity, *Daphnia pulex* [1]	%	------	Quarterly	Daily Composite	ATMR/DMR	
Aquatic Toxicity, *Pimephales promelas* [1]	%	------	Quarterly	Daily Composite	ATMR/DMR	
Arsenic, Total	mg/l	------	Quarterly	Daily Composite	ATMR	*
Beryllium, Total	mg/l	------	Quarterly	Daily Composite	ATMR	*
Cadmium, Total	mg/l	------	Quarterly	Daily Composite	ATMR	*
Chromium, Hexavalent	mg/l	------	Quarterly	Daily Composite	ATMR	
Chromium, Total	mg/l	------	Quarterly	Daily Composite	ATMR	
Chlorine, Total Residual	mg/l	------	Quarterly	Daily Composite	ATMR	*
Copper, Total	mg/l	------	Quarterly	Daily Composite	ATMR	
Cyanide, Amenable	mg/l	------	Quarterly	Daily Composite	ATMR	*
Cyanide, Total	mg/l	------	Quarterly	Daily Composite	ATMR	*
Lead, Total	mg/l	------	Quarterly	Daily Composite	ATMR	
Mercury, Total	mg/l	------	Quarterly	Daily Composite	ATMR	*
Nickel, Total	mg/l	------	Quarterly	Daily Composite	ATMR	
Nitrogen, Ammonia (total as N)	mg/l	------	Quarterly	Daily Composite	ATMR	
Nitrogen, Nitrate, (total as N)	mg/l	------	Quarterly	Daily Composite	ATMR	
Nitrogen, Nitrite, (total as N)	mg/l	------	Quarterly	Daily Composite	ATMR	
Phenols, Total	mg/l	------	Quarterly	Daily Composite	ATMR	
Selenium, Total	mg/l	------	Quarterly	Daily Composite	ATMR	
Silver, Total	mg/l	------	Quarterly	Daily Composite	ATMR	*
Thallium, Total	mg/l	------	Quarterly	Daily Composite	ATMR	
Zinc, Total	mg/l	------	Quarterly	Daily Composite	ATMR	
CONDITION: [1] The results of the Toxicity Tests are recorded in % survival, however, the permittee shall report pass/fail on the DMR based on criteria in Section 6(B) of this permit.						

TABLE B-1

Discharge Serial Number (DSN): **002-1**				Monitoring Location: **T**		
Wastewater Description: Microscreen treated excess combined sewer wastewater						
Monitoring Location Description: **Supplemental Treatment Facility Effluent Prior to Chlorination**						
PARAMETER	**Units**	**Maximum Daily Limit**	**Sampling Frequency**	**Sample Type**	**Reporting form**	**Minimum Level Analysis See Section 6**
Antimony, Total	mg/l	------	Semiannual	Daily Composite	ATMR	
Aquatic Toxicity, *Daphnia pulex* [1]	%	------	Semiannual	Daily Composite	ATMR	
Aquatic Toxicity, *Pimephales promelas* [1]	%	------	Semiannual	Daily Composite	ATMR	
Arsenic, Total	mg/l	------	Semiannual	Daily Composite	ATMR	*
Beryllium, Total	mg/l	------	Semiannual	Daily Composite	ATMR	*
Cadmium, Total	mg/l	------	Semiannual	Daily Composite	ATMR	*
Chromium, Hexavalent	mg/l	------	Semiannual	Daily Composite	ATMR	
Chromium, Total	mg/l	------	Semiannual	Daily Composite	ATMR	
Chlorine, Total Residual	mg/l	------	Semiannual	Daily Composite	ATMR	*
Copper, Total	mg/l	------	Semiannual	Daily Composite	ATMR	
Cyanide, Amenable	mg/l	------	Semiannual	Daily Composite	ATMR	*
Cyanide, Total	mg/l	------	Semiannual	Daily Composite	ATMR	*
Lead, Total	mg/l	------	Semiannual	Daily Composite	ATMR	
Mercury, Total	mg/l	------	Semiannual	Daily Composite	ATMR	*
Nickel, Total	mg/l	------	Semiannual	Daily Composite	ATMR	
Nitrogen, Ammonia (total as N)	mg/l	------	Semiannual	Daily Composite	ATMR	
Nitrogen, Nitrate, (total as N)	mg/l	------	Semiannual	Daily Composite	ATMR	
Nitrogen, Nitrite, (total as N)	mg/l	------	Semiannual	Daily Composite	ATMR	
Phenols, Total	mg/l	------	Semiannual	Daily Composite	ATMR	
Selenium, Total	mg/l	------	Semiannual	Daily Composite	ATMR	
Silver, Total	mg/l	------	Semiannual	Daily Composite	ATMR	*
Thallium, Total	mg/l	------	Semiannual	Daily Composite	ATMR	
Zinc, Total	mg/l	------	Semiannual	Daily Composite	ATMR	
CONDITION: [1] The results of the Toxicity Tests are recorded in % survival, however, the permittee shall report pass/fail on the DMR based on criteria in Section 6(B) of this permit.						

TABLE C

Discharge Serial Number: **001-1**	Monitoring Location: **N**			
Wastewater Description: **Secondary treatment**				
Monitoring Location Description: **Each Aeration Tank Effluent**				
PARAMETER	**REPORTING FORMAT**	**INSTANTANEOUS MONITORING**		**REPORTING FORM**
		Sample Frequency	Sample Type	
Oxygen, Dissolved	High & low for each Workday	4/Workday	Grab	MOR
Sludge Volume Index	Workday	Workday	Grab	MOR
Mixed Liquor Suspended Solids	Workday	Workday	Grab	MOR

TABLE D

Discharge Serial Number: **001-1**			Monitoring Location: **G**				
Wastewater Description: **Sanitary Sewage**							
Monitoring Location Description: **Influent**							
PARAMETER	**Units**	**DMR REPORTING FORMAT**	**FLOW/TIME BASED MONITORING**		**INSTANTANEOUS MONITORING**		**REPORTING FORM**
			Sample Frequency	**Sample Type**	**Sample Frequency**	**Sample Type**	
Biochemical Oxygen Demand (5 day)	mg/l	Monthly average	3/week	Daily Composite	NA	NA	DMR/MOR
Nitrogen, Ammonia (total as N)	mg/l		Monthly	Daily Composite	NA	NA	NAR
Nitrogen, Nitrate (total as N)	mg/l		Monthly	Daily Composite	NA	NA	NAR
Nitrogen, Nitrite (total as N)	mg/l		Monthly	Daily Composite	NA	NA	NAR
Nitrogen, TKN	mg/l		Monthly	Daily Composite	NA	NA	NAR
Nitrogen, Total	mg/l		Monthly	Daily Composite	NA	NA	NAR
pH	S.U.		NA	NA	Workday	Grab	MOR
Solids, Total Suspended	mg/l	Monthly average	3/week	Daily Composite	NA	NA	DMR/MOR
Temperature	°F		NA	NA	Workday	Grab	MOR

TABLE E

Discharge Serial Number: **001-1**			Monitoring Location: **P**				
Wastewater Description: **Primary Effluent**							
Monitoring Location Description: **Primary Sedimentation Basin Effluent**							
PARAMETER	**Units**	**REPORTING FORMAT**	**TIME/FLOW BASED MONITORING**		**INSTANTANEOUS MONITORING**		**REPORTING FORM**
			Sample Frequency	**Sample Type**	**Sample Frequency**	**Sample Type**	
Alkalinity, Total	mg/l		NA	NA	Monthly	Grab	MOR
Biochemical Oxygen Demand (5 day)	mg/l	Monthly average	Weekly	Composite	NA	NA	MOR
Nitrogen, Ammonia (total as N)	mg/l		Monthly	Composite	NA	NA	NAR
Nitrogen, Nitrate (total as N)	mg/l		Monthly	Composite	NA	NA	NAR
Nitrogen, Nitrite (total as N)	mg/l		Monthly	Composite	NA	NA	NAR
Nitrogen, TKN	mg/l		Monthly	Composite	NA	NA	NAR
Nitrogen, Total	mg/l		Monthly	Composite	NA	NA	NAR
pH	S.U.		NA	NA	Monthly	Grab	MOR
Solids, Total Suspended	mg/l	Monthly average	Weekly	Composite	NA	NA	MOR

TABLE F

Discharge Serial Number: **001-1**	Monitoring Location: **S**		
Wastewater Description: **Blended Thickened Sludge**			
Monitoring Location Description: **At sludge draw off**			
PARAMETER	**INSTANTANEOUS MONITORING**		**REPORTING FORM**
	Units	**Grab Sample Freq.**	
Arsenic, Total	mg/kg	Bi-monthly	DMR
Beryllium, Total	mg/kg	Bi-monthly	DMR
Cadmium, Total	mg/kg	Bi-monthly	DMR
Chromium, Total	mg/kg	Bi-monthly	DMR
Copper, Total	mg/kg	Bi-monthly	DMR
Lead, Total	mg/kg	Bi-monthly	DMR
Mercury, Total	mg/kg	Bi-monthly	DMR
Nickel, Total	mg/kg	Bi-monthly	DMR
Nitrogen, Ammonia	mg/kg	Bi-monthly	DMR*
Nitrogen, Nitrate (total as N)	mg/kg	Bi-monthly	DMR*
Nitrogen, Organic	mg/kg	Bi-monthly	DMR*
Nitrogen, Nitrite (total as N)	mg/kg	Bi-monthly	DMR*
Nitrogen, Total	mg/kg	Bi-monthly	DMR*
pH	S.U.	Bi-monthly	DMR*
Polychlorinated Biphenyls	mg/kg	Bi-monthly	DMR
Solids, Fixed	%	Bi-monthly	DMR
Solids, Total	%	Bi-monthly	DMR
Solids, Volatile	%	Bi-monthly	DMR
Zinc, Total	mg/kg	Bi-monthly	DMR
*** required for composting or land application only**			

ATTACHMENT 2

MONTHLY OPERATING REPORT FORM
AND
NUTRIENT ANALYSIS REPORT

NORWALK WPCF Facility Id: 103-001 Superintendent: Date received: (stamped)

Sample month/year: Phone: Page 1 of MOR for permit # CT 0101249

	Daily Flow			Primary Sludge			Aeration Tank #1				Aeration Tank #2				Aeration Tank #3				Aeration Tank #4				Aeration Tank #5				Return sludge		Waste sludge	Dry solids	
									High	Low			High	Low			High	Low			High	Low			High	Low					
	Max.	Min.	Total	Vol.	%	wt.	MLSS	SVI	D.O.	D.O.	MLSS	SVI	D.O.	D.O.	MLSS	SVI	D.O.	D.O.	MLSS	SVI	D.O.	D.O.	MLSS	SVI	D.O.	D.O.	%flow	%solids		in	out
Units	mgd			gal.	solids	lbs.			mg/l				mg/l				mg/l				mg/l				mg/l				lbs	lbs	
Freq	daily			work day			work day				work day				work day				work day				work day				work day		work day	work day	
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Sludge Disposal Location: _____

Waste	BOD (5-day)			Suspended Solids			Settleable	Turbidity	Chlorine		Chlorine		Fecal	D.O.	Total	Total N	Total N	Alkalinity	pH			Temp.	
accepted	Inf.	Prim.	Final	Inf.	Prim.	Final	Solids		Dose		Residual		Coliform		Nitrogen					Prim.			
septic		Eff.	Eff.		Eff.	Eff.	Eff.	Eff.			high	low	Eff.	Eff.	Effluent	Eff.	Eff.	Eff.	Inf.	Eff.	Eff.	Inf.	Eff.
gal	mg/l			mg/l			ml/l	NTU	lbs	mg/l	mg/l		#/100 ml	mg/l	mg/l	Total	12 month	mg/l	S.U.			°F	
work day	3 per week	weekly	3 per week	3 per week	weekly	3 per week	work day	work day	Daily		4/work day		3 per week	work day	weekly	lbs per month	rolling average	weekly	work day	1 per month	work day	work day	

Please return forms to:
DEP - Bureau of Water Management
ATTN: Municipal Wastewater Monitoring Coordinator
Municipal Facilities
79 Elm Street
Hartford, CT 06106-5127

Statement of Acknowledgement

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment for knowing violations.

Authorized Official:

Title: Superintendent

Signature: _____

Date: _____

TABLE B

Nutrient Analysis Report

for compliance with NPDES Permit

NORWALK WPCF Permit # CT0101249 Flow Rate _____ mgd Sampling Date __/__/__

Parameter	Raw Influent		Primary Effluent		Final Effluent		Plant Efficiency
	mg/l	lbs/day	mg/l	lbs/day	mg/l	lbs/day	%
Ammonia							
Nitrite							
Nitrate							
TKN							
Total Nitrogen = TKN + nitrite + nitrate							
Orthophosphates							
Total Phosphorus							

Notes: lbs/day = 8.34 x flow (mgd) x mg/l of pollutant
Flow = Total daily flow on sampling date (mgd)
Plant Efficiency = 100% x (raw influent – final effluent) / raw influent

DATA TRACKING AND TECHNICAL FACT SHEET

Permittee: City of Norwalk **PAMS Company ID**: 92423

PERMIT, ADDRESS, AND FACILITY DATA

PERMIT #: CT0101249 **APPLICATION #:** 200101436 **FACILITY ID:** 103-001

Mailing Address:	Location Address:
Street: P.O. Box 5125	Street: 60 South Smith Street
City: Norwalk ST: CT Zip: 06856	City: E. Norwalk ST: CT Zip: 06855
Contact Name: Robert Sardaro	Contact Name: Robert Sardaro
Phone No.: (203) 854-3212 or 5517	Phone No.: (203) 854-3212 or 5517

PERMIT INFORMATION

DURATION 5 YEAR _X_ 10 YEAR __ 30 YEAR

TYPE New __ Reissuance _X_ Modification

CATEGORIZATION POINT (X) NON-POINT ( ) GIS #

NPDES (X) PRETREAT () GROUND WATER(UIC) ( ) GROUND WATER (OTHER) ( )

NPDES MAJOR(MA) _X_
NPDES SIGNIFICANT MINOR or PRETREAT SIU (SI)
NPDES or PRETREATMENT MINOR (MI)

COMPLIANCE SCHEDULE YES _X_ NO
POLLUTION PREVENTION __ TREATMENT REQUIREMENT__
WATER QUALITY REQUIREMENT _X_ OTHER

OWNERSHIP CODE
Private __ Federal __ State __ Municipal (town only) _X_ Other public

DEP STAFF ENGINEER - Rowland C. Denny

PERMIT FEES

Discharge Code	DSN Number	Annual Fee
111000f	001-1	$2880.00

FOR NPDES DISCHARGES
Drainage basin Code: 7300 Present/Future Water Quality Standard: C/B

NATURE OF BUSINESS GENERATING DISCHARGE
Municipal Wastewater Treatment

PROCESS AND TREATMENT DESCRIPTION (by DSN)
001-1 - Activated sludge w/Nitrification/Denitrification and year round chlorination/dechlorination.
002-1 - Microscreen treatment of wet weather CSO flows with year round chlorination.

RESOURCES USED TO DRAFT PERMIT

_X_ *Federal Effluent Limitation Guideline 40CFR 133*
Secondary Treatment Category

__ *Performance Standards*

__ *Federal Development Document*
name of category

_X_ *Department File Information*

_X_ *Connecticut Water Quality Standards*

__ *Anti-degradation Policy*

_X_ *Coastal Management Consistency Review Form*

__ *Other - Explain*

BASIS FOR LIMITATIONS, STANDARDS OR CONDITIONS

_X_ *Secondary Treatment*

_X_ *Case-by-Case Determination (See Other Comments)*

_X_ *Section 22a-430-4(r) of the Regulations of Connecticut State Agencies*

__ *In order to meet in-stream water quality (See General Comments)*

__ *Anti-degradation policy*

GENERAL COMMENTS

The need for inclusion of water quality based discharge limitations in this permit was evaluated consistent with Connecticut Water Quality Standards and criteria, pursuant to 40 CFR 122.44(d). Each parameter was evaluated for consistency with the available aquatic life criteria (acute and chronic) and human health (fish consumption only) criteria, considering the zone of influence allocated to the facility where appropriate. The statistical procedures outlined in the EPA Technical Support Document for Water Quality-based Toxics Control (EPA/505/2-90-001) were employed to calculate the need for such limits. Comparison of monitoring data and its inherent variability with the calculated water quality based limits indicates a low statistical probability of exceeding such limits. Therefore, no water quality based limits were included in the permit at this time.

OTHER COMMENTS

A compliance schedule is included in this permit to include the applicable minimum controls for CSOs. Norwalk has no overflows located in the collection system. Past Separation and Infiltration/Inflow (I/I) removal projects enabled the City to take all flows to the WPCF site. Flows above 30 MGD may be diverted to supplemental treatment consisting of microscreen treatment units followed by sodium hypochlorite disinfection and discharge. All flows below 30 MGD receive advanced treatment.

This permit requires additional monitoring on the final effluent from 001-1 during bypass events, on aeration tank dissolved oxygen(an increase from daily to 4 per workday) and on sludge (an increase from 4 to 6 times per year).

WATER QUALITY LIMIT CALCULATIONS

See attached